



memo portland

to **Tabitha Boschetti, Erin Engman, Steve Koper, City of Tualatin**
from **Jon Pheanis, Sou Garner, MIG**
re **Code Concepts**
date **4/1/21**

Introduction

The City of Tualatin is working to improve housing choices across the city. Recently adopted housing policies from Tualatin 2040 call for prioritizing adequate housing supply, housing that is affordable, and more opportunities for redevelopment. The state has also recently created legislation that addresses the need for more housing availability, which resulted in the passage of House Bill 2001. Specific changes that will help the City meet its housing goals, while being consistent with statewide requirements for middle housing are provided in Oregon Administrative Rules (OAR) 660-046 (Division 46), adopted on December 9, 2020. The Middle Housing Code Update project helps implement the vision and policies of Tualatin 2040 by addressing needed changes to the Tualatin zoning code in support of greater housing choices and meet the statewide requirements.

The Code Concepts help illustrate middle housing types and provide findings related to the siting and development of required middle housing in Tualatin. In addition to the Code Audit, this information will help frame code amendments that will take place in the next phase of this project.

Code Concept Diagrams

The graphics provided in this document are intended to show a typical single-family residential lot in the city, showing examples of detached and attached middle housing, consistent with the current siting standards of the Tualatin Development Code (TDC). The diagrams show basic housing configurations within building envelopes and setbacks, as well as potential building layout, entries, and parking. For consistency and to control for variables, all diagrams assume development of two-story housing, maximum allowable lot coverage and one off-street parking space per unit. There are several different variations of each type of middle housing including stacked flats, basement duplexes, existing homes conversions and adding additional structures to a site.

The RL Zone was selected to test potential middle housing types in Tualatin. In general, the smaller the lot size (6,000 s.f.), the more challenging it is to add

additional buildings as setbacks, parking, and lot coverage requirements all reduce the area remaining for the building envelope(s).

Discussions with the Tualatin Planning Commission also indicated the desire to test other zoning scenarios to understand potential trade-offs or opportunities with different lot sizes. In addition to the RL Zone, the code concepts include diagrams for the RL Zone with reduced setbacks and the RML Zone with a larger lot size of 10,000 s.f.. The tables below summarize the site parameters used for the code concepts in this memo, depicted in the building envelope diagrams.

Table 1: RL Zone Site Parameters

Existing City Standards	
A. Front Setback	15'
B. Side Setback	5'
C. Rear Setback	15'
D. Garage Setback	20'
Building Separation	6'
Lot Coverage (Max.)	45%
Code Concept Assumptions	
Lot Coverage	2,700 s.f.
Off-Street Parking	1/unit

Figure 1: RL Zone Building Envelope (6,000 s.f. lot)

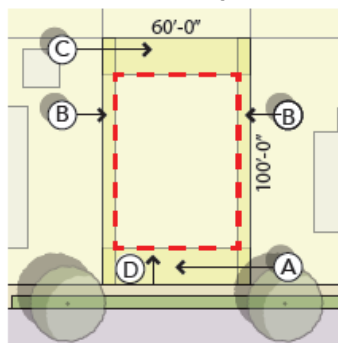


Table 2: RL Zone Site Parameters (Reduced Setbacks)

Existing City Standards	
A. Front Setback	10'
B. Side Setback	5'
C. Rear Setback	10'
D. Parking Setback	0'
Building Separation	6'
Lot Coverage (Max.)	45%
Code Concept Assumptions	
Lot Coverage	2,700 s.f.
Off-Street Parking	1/unit

Figure 2: RL Zone Reduced Setbacks Building Envelope (6,000 s.f. lot)

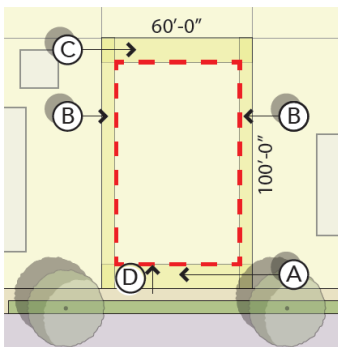
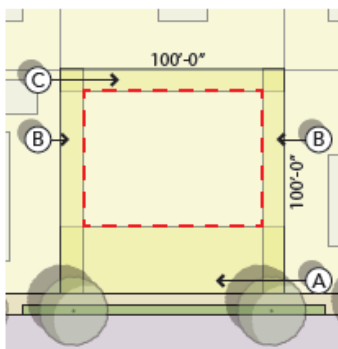


Table 3: RML Zone Site Parameters

Existing City Standards	
E. Front Setback	30'
F. Side Setback	10'
G. Rear Setback	10'
H. Parking Setback	10'
Building Separation	10'
Lot Coverage (Max.)	45%
Code Concept Assumptions	
Lot Coverage	4,000 s.f.
Off-Street Parking	1/unit

Figure 3: RML Zone Building Envelope (10,000 s.f. lot)



Summary of Key Findings and Preliminary Recommendations

Based on outcomes of the code audit and after developing code concepts for middle housing types in Tualatin, there are several key findings and preliminary recommendations to consider for next steps in this project.

- Consider applying updated standards for single-family housing towards review of middle housing: The City will be updating code amendments based on clear and objective standards. Currently, the TDC has two separate design standards: one for single-family residential and one for common wall housing which includes duplexes, townhouses and multi-family developments. The common wall design standards contain several requirements that are more restrictive than those for single-family residential including private and shared outdoor areas, and accessways. The City must allow the same set of clear and objective standards to middle housing as it does to single-family housing with an updated set of design standards for these housing types.
- Consider allowing detached middle housing types for plexes: OAR 660-046-0020 allows a large city to define whether a detached duplex, triplex or quadplex should be permitted. Currently, the TDC does not allow detached duplexes. During discussions with the Tualatin Planning Commission, some commissioners expressed interest in allowing detached plexes, especially to provide for greater privacy and for greater flexibility. If the City allows detached plexes, review of the code concepts shows that this type of middle housing can be achieved in most cases. The current standards would not allow for development of detached quadplex on a 6,000 s.f. lot without reductions in setbacks (Figures 8 and 9). Development on a larger than 6,000 s.f. lot size (Figures 10 and 11) would accommodate a detached quadplex.
- Update development and design standards for triplexes and quadplexes to create a better transition within existing single-family residential neighborhoods: The siting and design of duplexes (at two units per lot) or townhouses (with one unit per lot) is generally easier than for triplexes and quadplexes, especially on a smaller lot. Triplexes and quadplexes have more units per lot which leads to more required parking, building entrances and other features. The Model Code offers several standards the City should consider to better transition these types of middle housing into existing single-family residential neighborhoods. For example, the Model Code provides scaled maximum Floor Area Ratio (FAR) standards based on square footage of all buildings onsite. This FAR standard will help regulate the bulk of larger buildings such as a triplex or quadplex, especially on a smaller lot.
- Update requirements for townhouses: The standards for density, minimum lot size and maximum lot coverage, and the buffering standards in the residential zoning districts will need to be revised to comply with the adopted rules as some zoning district standards comply with the OAR while others do not. In addition, the City may require a break in the 'block' of townhouse

units, meaning a development can include several blocks (structures) that feature up to four units in each block.

- Apply Model Code for cottage clusters: Cottage Cluster housing is a unique middle housing type with specific requirements that do not apply to other middle housing types. The City's existing multi-family and single-family design standards are not geared toward this type housing, so a unique set of design standards may be needed. The Middle Housing Model Code offers clear and objective design standards that the City may apply to this housing type, including guidance on common courtyards, perimeter setbacks, and other design elements. For cottage cluster housing, the Model Code also includes provisions to help regulate additional housing development on a lot that already contains a single-family detached structure.
- Clarify ADU provisions: TDC 34.600 allows ADUs in the RL zone and within the RML zone if part of a Small Lot Subdivision. Most of the existing requirements regulate an ADU based on its relation to the adjoining single-family detached dwelling unit. Existing requirements in the TDC distinguish ADU's from other detached housing types. Unlike a duplex, the primary difference for an ADU is that TDC 34.600 requires utilities for an ADU (water, power, gas) to be served by the same meters as the single-family detached home. Another difference is that an ADU's front door must not be located on the same street frontage as the detached single-family home and there are limits to the size of an ADU (a maximum of 800 s.f. of gross floor area). However, the City should consider modifying TDC 34.600 and 31.060 to clarify whether an ADU can be accessory to a duplex, triplex or quadplex.

1. Duplexes

Definition: “Duplex” means two attached dwelling units on a Lot or Parcel. A local government may define a Duplex to include two detached dwelling units on a Lot or Parcel.



Single story attached duplex



Two-story and detached duplexes

Code Audit Findings

Currently duplexes are permitted through the conditional use process in the RL zone. Per the state’s OARs, duplexes generally must be subject to the same (or less restrictive) standards as the City applies to single-family detached dwellings (SFD)—including minimum lot size, setbacks, height, and lot coverage standards (Table 4).

Table 4: Required Site Standards for Middle Housing (OARs)

Lot/Parcel Size	
Setbacks	Same or less restrictive than requirements for SFD housing requirements in the same zone
Height	
Parking	<ul style="list-style-type: none">• Up to 2 spaces per duplex• On-street parking may count towards required parking

Code Concepts

OAR Division 46 requires that the City allow duplex housing types in areas zoned for residential use and that allow single family detached dwellings. Based on site parameters for the RL zone and when applying state requirements for duplexes, the Development Code allows for this housing type without the need for modifications as discussed in the following findings and in Figures 4 and 5. Under OAR Division 46, the maximum density in the RL zone of 6.4 units/acre does not apply to duplexes.

Figure 4: Attached Duplex in RL Zone

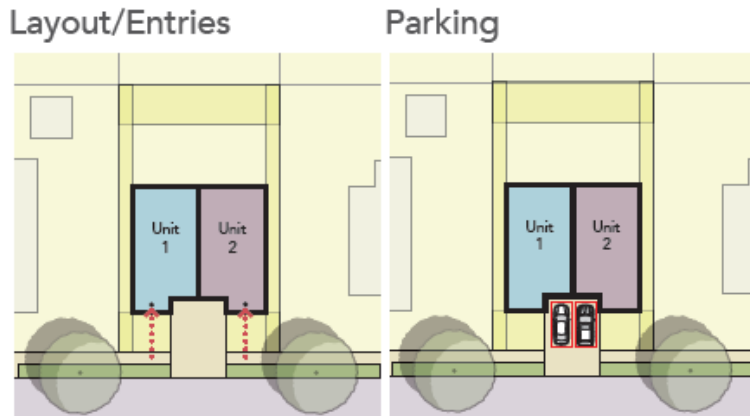
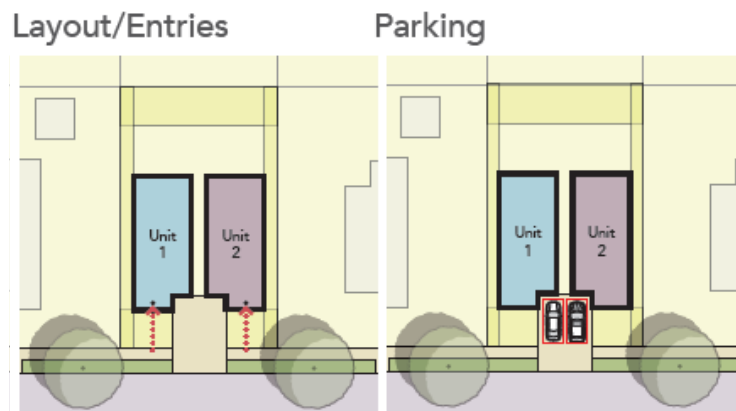


Figure 5: Detached Duplex in RL Zone



Other considerations for the City include:

- Based on standards of the smallest lot size (6,000 s.f. in the RL zone), development of duplex could meet existing site development standards of Chapter 40 (RL Zone) and Chapter 73A (Site Design Standards). Figure 4 shows that an attached duplex would result in two 25-foot-wide housing units, and Figure 5 shows that a detached duplex would result in two 22-foot-wide housing units. Both housing widths would allow for a minimum garage width of 12 feet and an entry facing the public street. Both configurations would also allow for a 20-foot-wide shared driveway that would meet the existing standard of 10 feet (minimum).
- The OARs would reduce the number of required parking spaces than what are currently allowed. The State rules limit the maximum number of required off-street parking spaces to two per duplex while the TDC currently requires two per dwelling unit.
- The OARs do not require the City to permit detached versions of duplexes (Figure 4). Currently, TDC 31.060 does not allow detached duplexes and

defines a duplex as having a common wall or common floor/ceiling. If the City allows detached duplexes, the current standards have a minimum distance of six feet between buildings. As noted previously, a detached duplex could be achieved in the RL zone (Figure 5) by including the required six foot separation between housing units.

- Allowing detached duplexes may create complications with detached Accessory Dwelling Units (ADUs). For example, if a lot contained a detached duplex and an applicant wanted to add an ADU, the applicable code sections and rules may be challenging to apply for staff and the public. However, existing requirements in the TDC distinguish ADU's from other detached housing types. Unlike a duplex, the primary difference for an ADU is that TDC 34.600 requires utilities for an ADU (water, power, gas) to be served by the same meters as the single-family detached home. Another difference is that an ADU's front door must not be located on the same street frontage as the detached single-family home and there are limits to the size of an ADU (a maximum of 800 s.f. of gross floor area).

2. Triplexes and Quadplexes

Definition: "Triplex" means three attached dwelling units on a Lot or Parcel. A local government may define a Triplex to include any configuration of three detached or attached dwelling units on one Lot or Parcel. "Quadplex" means four attached dwelling units on a Lot or Parcel. A local government may define a Quadplex to include any configuration of four detached or attached dwelling units on one Lot or Parcel.



Two-story attached triplex



Single-story quadplex

Code Audit Findings

The Development Code currently classifies triplexes and quadplexes as multi-family structures and applies the same use, development, and design standards as apply to all other multi-family structures; "triplex" is distinctly defined in the code but "quadplex" is not. These housing types will need to be separated out from multi-family so that distinct design and development standards can be applied.

Table 5: Required Site Standards for Middle Housing (OARs)

Lot or Parcel Size: Triplexes	<ul style="list-style-type: none">• Up to 5,000 s.f. if min. lot/parcel size for SFD in the zone is up to 5,000 s.f.• No greater than min. lot size for SFD if SFD min. lot/parcel size is greater than 5,000 s.f.
Lot or Parcel Size: Quadplexes	<ul style="list-style-type: none">• Up to 7,000 s.f. if min. lot/parcel size for SFD in the zone is up to 7,000 s.f.• No greater than min. lot size for SFD if SFD min. lot/parcel size is greater than 7,000 s.f.
Setbacks	Same or less restrictive than requirements for SFD housing requirements in the same zone
Height	<ul style="list-style-type: none">• Same or less restrictive than requirements for SFD housing requirements in the same zone• Max. height may not be less than 25 feet (or 2 stories)
Parking: Triplexes	<ul style="list-style-type: none">• Lot size < 3,000 s.f.: up to 1 space• Lot size ≥ 3,000 s.f. - < 5,000 s.f.: up to 2 spaces• Lot size ≥ 5,000 s.f.: up to 3 spaces• On-street parking may count towards required parking

Parking: Quadplexes	<ul style="list-style-type: none"> • Lot size < 3,000 s.f.: up to 1 space • Lot size ≥ 3,000 s.f. - < 5,000 s.f.: up to 2 spaces • Lot size ≥ 5,000 - < 7,000 s.f.: up to 3 spaces • Lot size ≥ 7,000 s.f.: up to 4 spaces • On-street parking may count towards required parking
------------------------	---

Code Concepts

OAR Division 46 requires that the City allow triplex and quadplex housing types in areas zoned for residential use and that allow single family detached dwellings.¹ Based on site parameters for the RL zone and when applying state requirements for triplexes and quadplexes, the Development Code allows for triplexes (attached and detached) and attached quadplexes. However, the code would not accommodate a detached quadplex without the need for modifications (Figures 6 and 7). Other considerations for the City include:

- The rules do not require the City to permit detached versions of plexes (Figure 6). If the City allows detached plexes, the current standards would not allow for development of detached quadplex on a 6,000 s.f. lot without reductions in setbacks (Figures 8 and 9). Development on a larger than 6,000 s.f. lot size (Figures 10 and 11) would accommodate a detached quadplex.
- In the RL zone triplexes and attached quadplexes could be developed based on current standards, although these housing types would need to maximize the allowable footprint with few options for site configuration as noted earlier. The concepts assume a minimum unit size of 450 s.f. when developing under existing RL zoning standards. The Model Code provides scaled maximum Floor Area Ratio (FAR) standards based on square footage of all buildings onsite. This FAR standard could help regulate the bulk of larger buildings such as a triplex or quadplex, especially on a smaller lot.
- Reduced setbacks and/or larger lot sizes in the RML zone allow for greater flexibility in site design and a potential increase in unit sizes depending on building layout. Figure 9 also shows that a five-foot reduction in front and rear setbacks would accommodate a detached quadplex.
- Allowing multiple driveways could lead to potential conflicts with sidewalks and intersections. At 6,000 s.f., the building envelope limits parking which may dominate smaller lots (Figures 6 and 7). However, reduced setbacks or development in the RML zone would allow for greater flexibility in site design especially when reducing parking setbacks.

¹ Nothing in this rule prohibits a Large City from adopting an alternative approval process for applications and permits for Middle Housing based on approval criteria that are not clear and objective as provided in OAR 660-007-0015(2), OAR 660-008-0015(2), and ORS 197.307(6).

- The OARs do not allow density maximums for triplexes and quadplexes if density maximums are required in a zone. The RL zone currently has a maximum density of 6.4 units/acre for single-family detached housing, and the RML has a 10 units/acre maximum for household living uses.

Figure 6: Attached and Detached Triplex in RL Zone

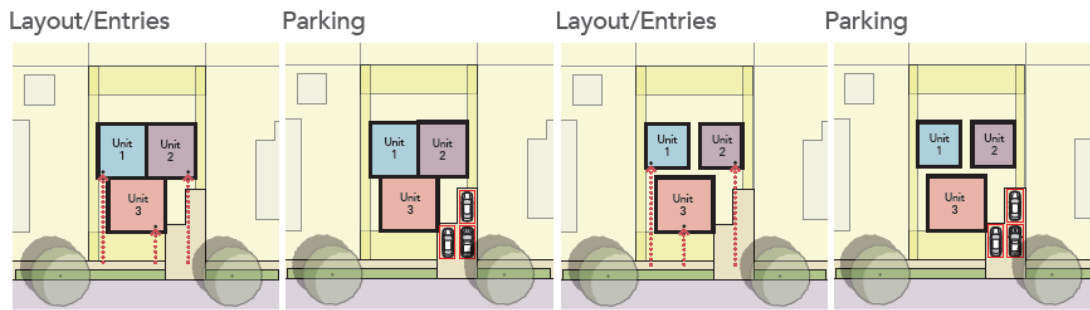


Figure 7: Attached Quadplex in RL Zone

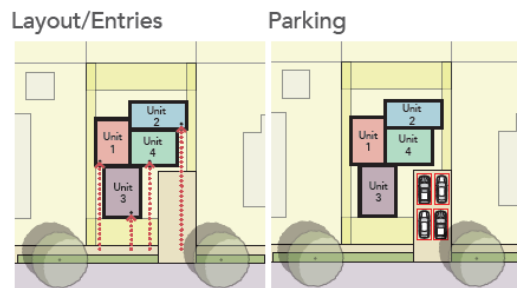


Figure 8: Attached and Detached Triplex in RL Zone (with Reduced Setbacks)

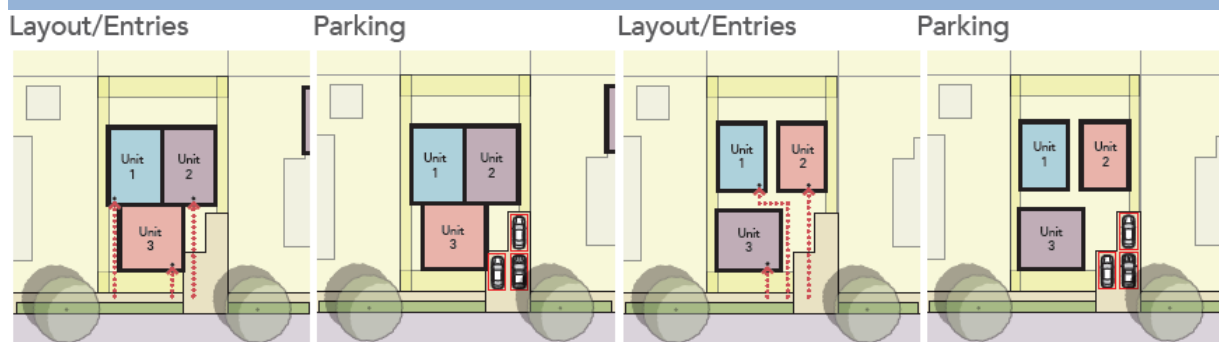


Figure 9: Attached and Detached Quadplex in RL Zone (with Reduced Setbacks)

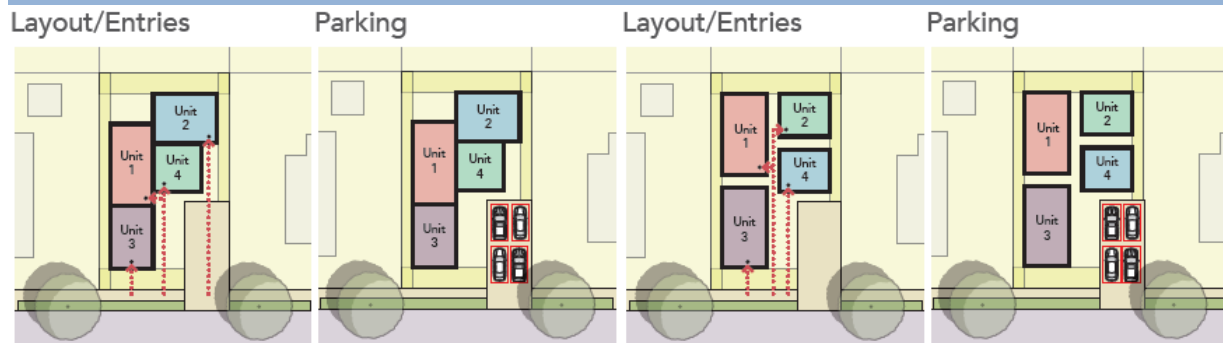


Figure 10: Attached and Detached Triplex in RML Zone

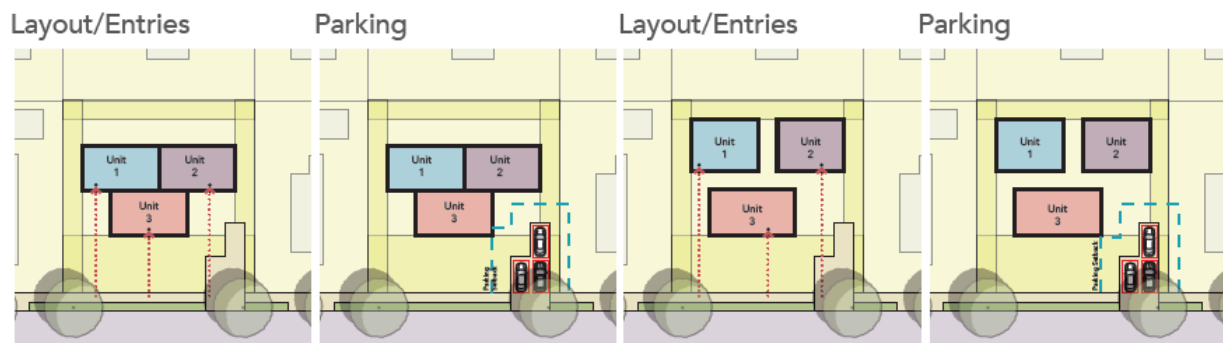
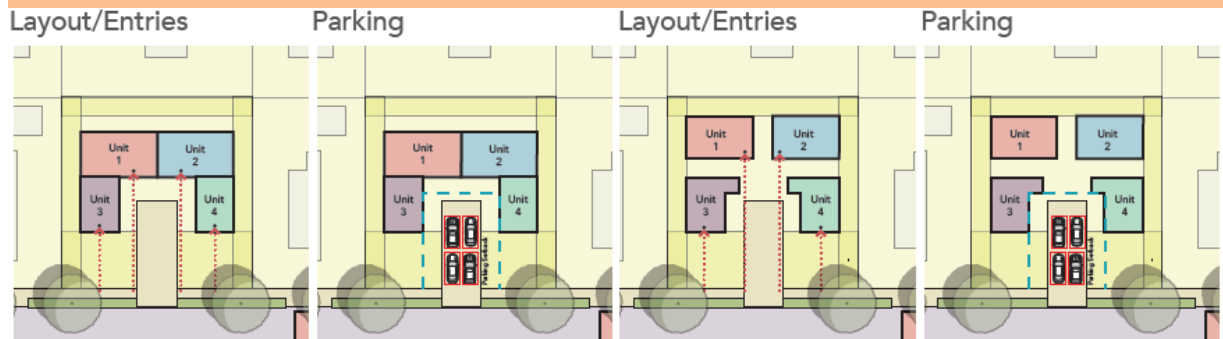


Figure 11: Attached and Detached Quadplex in RML Zone



3. Townhouses

Definition: “Townhouse” means a dwelling unit that is part of a row of two or more attached units, where each unit is located on an individual Lot or Parcel and shares at least one common wall with an adjacent unit.



Townhomes



Townhomes with alley-accessed garages

Code Audit Findings

The Development Code has a separate definition for townhouse/rowhouses, which are currently permitted as a conditional use in the RL district and an outright permitted use in the RML Zone. The standards for density, minimum lot size and maximum lot coverage, and the buffering standards in the residential zoning districts, will need to be revised to comply with the adopted rules as some zoning district standards comply with the OAR while others do not. The TDC requires townhouses to comply with multi-family design standards, which are more restrictive than the standards for SFDs.

Table 6: Required Site Standards for Middle Housing (OARs)

Lot or Parcel Size	<ul style="list-style-type: none">• If applied, the average min. lot/parcel size may not be greater than 1,500 s.f.• May apply separate min. lot/parcel size for internal, external, and corner townhouse lots/parcel if they average 1,500 s.f. or less.
Setbacks	<ul style="list-style-type: none">• Same or less restrictive than requirements for SFD housing requirements in the same zone• Must allow for 0' side setback for attached townhouses
Street Frontage	Min. may not exceed 20'
Height	<ul style="list-style-type: none">• Same or less restrictive than requirements for SFD housing requirements in the same zone
Parking	<ul style="list-style-type: none">• 1 space per dwelling unit• On-street parking may count towards required parking

Code Concepts

Two townhouses have similar characteristics as a duplex, except each townhome must be on its own lot. While setbacks are also similar, State rules limit the lot size to a maximum of 1,500 s.f.. Reducing setbacks in the RL Zone (Figure 13) would allow some additional site design flexibility, including the potential to increase setbacks for parking or to alternate the building footprint between two attached homes. Other considerations for the City include:

- Existing development standards would allow for adequate on-street parking, even with multiple driveways. Figure 14 shows lot widths of approximately 20 feet, resulting in approximately 20 feet between driveways for on-street parking. The OARs limit the maximum street frontage of a townhome to not exceed 20 feet.
- The City must allow at least two units to be developed in one shared structure, and up to four attached townhouse units. After that, the City may require a break in the 'block' of townhouse units, meaning a development can include several blocks (structures) that feature up to four units in each block. The OARs allow for a longer stretch of connected townhouses if desired by the City.
- For townhouses, the density must be at least four times the density of the base zone, or 25 dwelling units per acre, whichever is less. For the RL zone, the maximum density for single-family detached residential is 6.4 units per acre, which would equate to 25.6 units per acre for townhouses. Naturally, the maximum capacity of a property is limited by other site constraints such as parking, driveways, and water quality features.

Figure 12: Townhouses in RL Zone

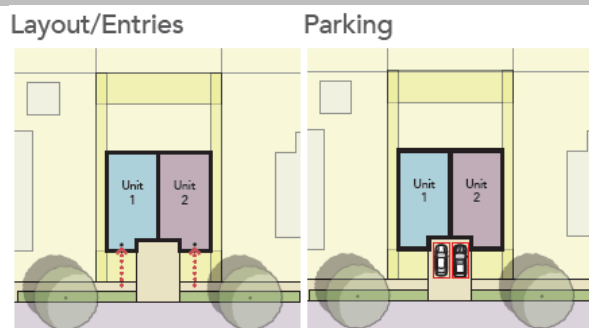


Figure 13: Townhouses in RL Zone (with Reduced Setbacks)

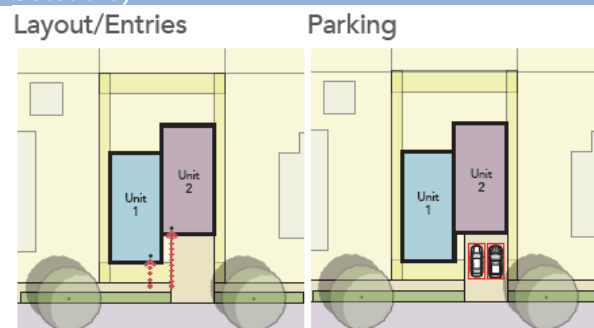


Figure 14: Townhouses in RML Zone



4. Cottage Clusters

Definition: "Cottage Cluster" means a grouping of no fewer than four detached dwelling units per acre, each with a footprint of less than 900 square feet that includes a common courtyard. Units may be located on a single Lot or Parcel, or on individual Lots or Parcels that include a common courtyard.



Cottage cluster housing and internal courtyard



Cottage cluster housing entrance

Code Audit Findings

The Development Code does not have a separate definition for cottage clusters, although it may be similar to the "garden apartment" which is defined. Similar to triplexes and quadplexes, cottage clusters will need to have a separate definition so that separate design and development standards can be applied. For design standards, cottage clusters have a unique set of requirements because they often involve shared parking, common open spaces, and a community building. The City's existing multi-family and single-family design standards are not geared toward this type housing, so a unique set of design standards may be needed.

Table 7: Required Site Standards for Middle Housing (OARs)

Lot or Parcel Size	Same or less restrictive than requirements for detached single-family housing requirements in the same zone
Setbacks	<ul style="list-style-type: none">• Same or less restrictive than requirements for detached single-family housing requirements in the same zone• Perimeter setbacks cannot exceed 10'• Min. distance between structures cannot exceed 10'
Street Frontage	Min. may not exceed 20'
Height	<ul style="list-style-type: none">• Same or less restrictive than requirements for detached single-family housing requirements in the same zone
Parking	<ul style="list-style-type: none">• 1 space per dwelling unit• On-street parking may count towards required parking

Code Concepts

Cottage cluster housing is a unique middle housing type due to the specific requirements related to maximum building footprint (less than 900 s.f.) and common courtyard. In addition, setbacks are measured along the perimeter. Although not specified in the OARs, the State's Model Code, developed alongside the OARs, uses guidelines that include a minimum courtyard size of 150 s.f. per unit, with a minimum courtyard width of 15'. Figures 15 and 16 illustrate different configurations of the courtyard using these dimensions.

Figure 15: Cottage Cluster Housing in RL Zone

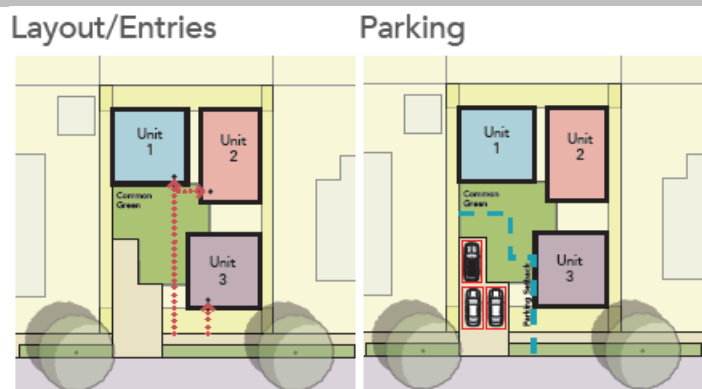
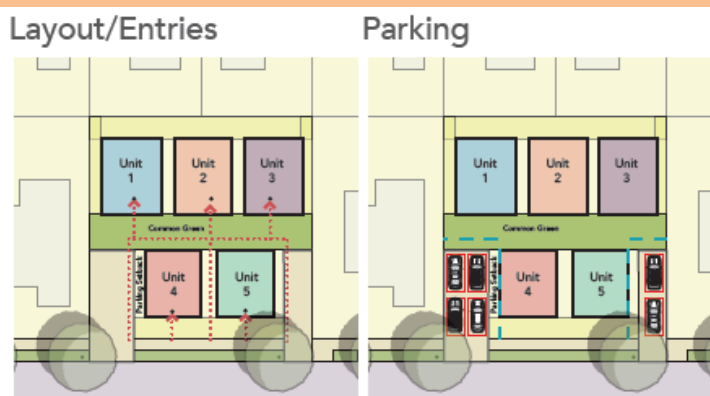


Figure 16: Cottage Cluster Housing in RML Zone



Considerations for the City include:

- For cottage clusters, Division 46 requires a minimum density of at least four units per acre. The rules do not require a city to set a minimum number of units. But if desired by a city, it may require a minimum of three, four, or five units in a cottage cluster, but no greater than five. The City must allow up to eight cottages per common courtyard, though it can allow more. The City's existing standards for RL and RML zoning would accommodate the minimum number of housing units required by the OARs. Up to three housing units could be accommodated using existing RL zoning district site parameters with a 6,000 s.f. lot size, while meeting site standards required

by the State. Figure 16 illustrates that additional housing units could be added within a larger, 10,000 s.f. lot size in the RML zone.

- The parking diagrams show required parking setbacks of ten feet (dashed blue lines), which limits site layout options when adding required parking. With a 10,000 s.f. lot (RML Zone) shown in Figure 16, there is greater flexibility to arrange required parking. However, the greater lot size could also result in additional dwelling unit and greater number of required parking spaces.
- With the exception of the common courtyard, there are minimal rear or side yards or separation from neighboring uses. The City may consider increasing setbacks up to the maximum allowed by state rules to increase separation between neighboring uses.
- The density must be a minimum of four dwelling units per acre. The OARs do not allow a density maximum. The State OARs are silent on a maximum per project. Even if a maximum unit count per project were added, a developer could split a property and make each lot its own 'project.' There may not be much function in adding a maximum unit count.